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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10291 | 7590 | 07/12/2006 | | EXAMINER |
| | | | | SPAHN, GAY |
| | | | ART UNIT | PAPER NUMBER |
| | | | | 3673 |

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|-----------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/708,435 | STRATMAN ET AL. |
| Examiner | Art Unit | |
| Gay Ann Spahn | 3673 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 02 May 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 5-9 and 11-20 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4, 10 and 21-26 is/are rejected.
- 7) Claim(s) 10 and 26 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 02 May 2006 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10 May 2006.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 10 May 2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Drawings

The Replacement Sheets (1/6-6/6) of drawings were received on 02 May 2006. The Replacement Sheets of drawings are approved by the examiner with the exception of the new drawing objection stated below.

In addition, the examiner notes that on page 4 of the Amendment filed on 02 May 2006, Applicants have stated that six annotated sheets showing changes were attached. While this is correct, the six sheets were not labeled "Annotated Sheet" at the top of the page as they should have been.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

(1) reference numerals "44" and "46" in Fig. 8.

The examiner believes that reference numeral "46" is meant to designate the panel (or panel member) and if this is correct, reference numeral "46" and an

accompanying discussion of the “panel” should be inserted into the specification at a location where the embodiment of Fig. 8 is being discussed.

The examiner believes that reference numeral “44” is meant to designate the orifice in the panel. However, the lead line ending in an arrowhead and pointing in the general direction of the orifice is not the correct way to show the orifice. The examiner suggests that the lead line be redrawn (without the arrowhead) to touch the outside edge of the panel (46) where the orifice begins. Further, reference numeral “44” and an accompanying discussion of the “orifice” should be inserted into the specification at a location where the embodiment of Fig. 8 is being discussed.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

(1) Paragraph No. [0019] is incorrect because only the plastic carrier (12) of Fig. 1A is shown in Fig. 6, not the entire physical barrier of Fig. 1B and therefore, Paragraph No. [0019] should be changed to something similar to --FIG. 6 is a cross-sectional view of a physical barrier according to another embodiment of the present invention, wherein the plastic carrier of FIG. 1A is shown as being joined to a heat-activatable patch in such a manner that the peripheral edge of the carrier is encapsulated.--;

(2) Paragraph No. [0020] is incorrect because only the plastic carrier (12) of Fig. 3A is shown in Fig. 7, not the entire physical barrier of Fig. 3B and therefore, Paragraph No. [0020] should be changed to something similar to --FIG. 7 is a cross-sectional view of a physical barrier according to another embodiment of the present invention, wherein the carrier of FIG. 3A is shown as being joined to a heat-activatable patch in such a manner that the peripheral edge of the carrier is encapsulated.--; and

(3) Paragraph No. [0021] is incorrect because only the plastic carrier (12) of Fig. 5A is shown in Fig. 6, not the entire physical barrier of Fig. 5B and therefore, Paragraph No. [0021] should be changed to something similar to --FIG. 9 is a cross-sectional view of a physical barrier according to another embodiment of the present invention, wherein the carrier of FIG. 5A is shown as being joined to a heat-activatable patch in such a manner that the peripheral edge of the carrier is encapsulated.--.

The examiner notes that in the remarks section on page 12 of the amendment filed on 02 May 2006, Applicants argued that paragraph nos. [0019]-[0021] are accurate and do not need to be changed. The examiner disagrees. The specification clearly differentiates between the physical barriers shown in Figs. 1A, 1B, 2, 3A, 3B, 4A, 4B,

5A, and 5B (barriers comprised of heat-activatable patches adhered to carriers where there is no encapsulation of the peripheral edge of the carrier) and the physical barriers shown in Figs. 6-8 (barriers comprised of heat-activatable patches adhered to carriers where there is encapsulation of the peripheral edge of the carrier). Therefore, it is simply wrong to say that Figs. 6, 7, and 8 show a cross-sectional view of the physical barriers of Figs. 1B, 3B, and 5B, respectively, because the barriers are different due to the no encapsulation of the peripheral edge of the carriers characterized in Figs. 1A, 1B, 2, 3A, 3B, 4A, 4B, 5A, and 5B and the encapsulation of the peripheral edge of the carriers characterized in Figs. 6-8.

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Changing the title from "ORIFICE SEALING PHYSICAL BARRIER" to "PHYSICAL BARRIER FOR SEALING AN ORIFICE" does not satisfactorily describe the invention in terms of being clearly indicative of the invention to which the claims are directed. If the encapsulation of the peripheral edge is what makes the claims to the barrier patentable, then this is what should be described in the title.

The use of the trademark El-vax® (lines 3-4 of paragraph no. [0032]) and Sylvaros (line 9 of paragraph no. [0033]) has been noted in this application. **It should**

be capitalized wherever it appears (only first letter of trademark, not all letters of trademark) and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

Claim 1 is objected to because of the following informalities:

(1) claim 1, line 3, one of the second and third occurrences of the word "a" should be deleted because as amended, the claim recites "a plastic carrier having a a deck portion . . .".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4, 10, 21, and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1, lines 6-7, the recitation that "said patch encapsulates said deck portion and a bottom surface of said circumferential lip" constitutes new matter because the specification only provides support for the peripheral edge (40) of the plastic carrier (12) being encapsulated by the patch (14) (see last sentence of paragraph no. [0029], the second sentence of paragraph no. [0030], and the second sentence of paragraph no. [0042]).

From viewing Fig. 8, it does not appear to be correct that the patch "encapsulates" the deck portion (16) although it is not clear from the specification what makes up the deck portion (with respect to the embodiments shown in Figs. 6-8, all the specification ever says about the deck (16) is that it supports the patch (14) so that it is unclear whether the deck portion is only the structure connecting the two legs of the carrier (12) or whether the deck portion also includes the upper portion of the legs and the lip (30)). Regardless of what structure constitutes the deck portion, it does not appear that the deck portion is encapsulated by the patch since Merriam-Webster's Collegiate® Dictionary (Tenth Edition, Copyright 1997, published by Merriam-Webster, Incorporated, Springfield, Massachusetts) defines the word "encapsulate" as "to enclose in or as if in a capsule" and it does not appear to the examiner that the deck portion is enclosed in or as if in a capsule by the patch (14).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4, 10, and 21-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 3-4, the recitation of "a plastic carrier having a deck portion surrounded by a circumferential lip" is vague, indefinite and confusing because it does not appear to the examiner that the deck portion (16) is surrounded by the circumferential lip (30). Merriam-Webster's Collegiate® Dictionary (Tenth Edition, Copyright 1997, published by Merriam-Webster, Incorporated, Springfield, Massachusetts) defines the word "surround" as "to enclose on all sides" or "envelop". The deck portion (16) does not appear to be enclosed on all sides or enveloped by the circumferential lip (30).

Claim 1, lines 6-7, the recitation that "said patch encapsulates said deck portion and a bottom surface of said circumferential lip" is vague, indefinite, and confusing because Merriam-Webster's Collegiate® Dictionary (Tenth Edition, copyright 1997, published by Merriam-Webster, Incorporated, Springfield, Massachusetts) defines the word "encapsulate" as "to enclose in or as if in a capsule" and the examiner notes that the deck portion (16) of the plastic carrier (12) shown in Fig. 8 does not appear to be enclosed in or as if in a capsule because not all sides of the deck portion (16) are enclosed within the patch (14),

Claim 1, lines 9-10, the recitation that "a center portion of said patch is supported by said deck portion of said plastic carrier" is vague, indefinite, and confusing because the center of the patch (14) in Fig. 8 does not appear to be supported by the deck

portion (16) unless the deck portion (16) includes the upper portion of the left and right legs of the carrier (12).

Claim 21, line 2, the recitation of "the panel" is vague, indefinite, and confusing as lacking antecedent basis because it is not clear if this is referring back to the "panel member" of claim 1. The examiner suggest amending to --the panel member--.

Claim 23, lines 3-4, the recitation of "said carrier includes a deck portion surrounded by a lip that extends from an outer surface of said second portion of said carrier" is vague, indefinite and confusing because it does not appear to the examiner that the deck portion (16) is surrounded by the lip (30). Merriam-Webster's Collegiate® Dictionary (Tenth Edition, Copyright 1997, published by Merriam-Webster, Incorporated, Springfield, Massachusetts) defines the word "surround" as "to enclose on all sides" or "envelop". The deck portion (16) does not appear to be enclosed on all sides or enveloped by the lip (30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 21-25 are rejected under 35 U.S.C. 102(b) as being unpatentable over Schmitz et al. (U.S. Patent No. 4,588,105) in view of DANICO (U.S. Patent No. 5,505,324).

As to claim 1, SCHMITZ et al. disclose (see embodiment of Fig. 6) a physical barrier (sealing plug 1) for sealing an orifice (at 31) in a panel member (30), comprising:
a plastic carrier (head portion 2 and flange 2a) having a deck portion surrounded by a circumferential lip;

a patch (3) adapted to adhere to said plastic carrier (2, 2a) and the panel member (30);

wherein said patch (3) encapsulates a bottom surface of said circumferential lip;
and

SCHMITZ et al. fail to explicitly disclose that said patch encapsulates said deck portion and that a center portion of said patch is supported by said deck portion of said plastic carrier.

DANICO discloses a hole closure comprising a patch (annular disk 34) which is made of a heat-activated sealant material, wherein the patch (34) encapsulates the deck portion (12) and has a center portion that is supported by the deck portion (12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the physical barrier of SCHMITZ et al. by making his patch larger so as to encapsulate the deck portion of the plastic carrier, not just the edges thereof, and having a center portion supported by the deck portion of the plastic carrier as taught by DANICO in order to provide a tighter seal.

As to claim 2, SCHMITZ et al. in view of DANICO discloses the physical barrier of claim 1 as discussed above.

The examiner notes that the recitation of "wherein said patch is configured to seal an interface between said plastic carrier and the orifice upon being heat-activated" only recites intended assembly. Neither the panel member nor its orifice are positively recited and therefore, do not form a part of the invention. Only the seal per se is claimed and forms a part of the invention. Further, the recitation of "upon being heat-activated" is a method limitation which is not given any patentable weight in an apparatus/product/article of manufacture claim.

Nevertheless, SCHMITZ et al. disclose that the patch (3) is configured to seal an interface between said plastic carrier (2, 2a) and the orifice (31) of the panel member (30) upon being heat-activated (see Abstract, col. 3, lines 31-35, and col. 4, lines 17-22).

In addition, DANICO also discloses that the annular disk (34) is made of a sealant material that has the property of flowing when heated to a predetermined temperature (see col. 3, lines 26-45).

As to claim 3, SCHMITZ et al. in view of DANICO disclose the physical barrier of claim 2 as discussed above.

The examiner notes that the recitation of "wherein a portion of said patch is disposed between said plastic carrier and the panel member to seal the plastic carrier and the orifice upon being heat-activated" only recites intended assembly. Neither the panel member nor its orifice are positively recited and therefore, do not form a part of the invention. Only the seal per se is claimed and forms a part of the invention.

Further, the recitation of “upon being heat-activated” is a method limitation which is not given any patentable weight in an apparatus/product/article of manufacture claim.

Nevertheless, SCHMITZ et al. disclose that a portion of said patch (3) is disposed between said plastic carrier (2, 2a) and the panel member (30) to seal the plastic carrier (2, 2a) and the orifice (31) upon being heat-activated (see Abstract, col. 3, lines 31-35, and col. 4, lines 17-22).

In addition, DANICO also discloses that the annular disk (34) is made of a sealant material that has the property of flowing when heated to a predetermined temperature (see col. 3, lines 26-45).

As to claim 4, SCHMITZ et al. in view of DANICO disclose the physical barrier of claim 1 as discussed above.

The examiner notes that the recitation of “wherein said carrier is adapted to be attached to said panel member” only recites intended assembly. The panel member is not positively recited and therefore, does not form a part of the invention. Only the seal per se is claimed and forms a part of the invention.

Nevertheless, SCHMITZ et al. disclose that the carrier (2, 2a) is adapted to be attached to said panel member (30) via the patch (3) upon heat-activation (see Abstract, col. 3, lines 31-35, and col. 4, lines 17-22).

In addition, DANICO also discloses that the annular disk (34) is made of a sealant material that has the property of flowing when heated to a predetermined temperature (see col. 3, lines 26-45).

As to claim 21, SCHMITZ et al. in view of DANICO disclose the physical barrier of claim 1 as discussed above.

The examiner notes that the recitation of "wherein said deck portion of said carrier substantially covers the orifice in the panel" only recites intended assembly. The panel member is not positively recited and therefore, does not form a part of the invention. Only the seal per se is claimed and forms a part of the invention.

Nevertheless, SCHMITZ et al. also discloses that said deck portion (2) of said carrier (1) substantially covers the orifice (31) in the panel (30).

As to claim 22, SCHMITZ et al. in view of DANICO disclose the physical barrier of claim 1 as discussed above, and DANICO also discloses that said patch (34) covers said deck portion (12) of said carrier (12, 14, 16, 18, 28, and 30).

As to claim 23, SCHMITZ et al. disclose a physical barrier for sealing an orifice in a panel, comprising:

a carrier (1) having a first portion (lower portion of 1) inserted into an orifice (31) and a second portion (upper portion of 1) remaining above said orifice (31), said carrier (1) includes a deck portion (2) surrounded by a lip (2a) that extends from an outer surface of said second portion (upper portion of 1) of said carrier (1); and

a patch (3 in Fig. 6) configured to cover an outer edge and a bottom surface (14) of said lip (2a);

wherein said deck portion (2) of said carrier (1) covers the orifice (31)

SCHMITZ et al. fail to explicitly disclose that the patch is configured to cover said second portion of said carrier and that said deck portion provides support for a center portion of said patch.

DANICO discloses a hole closure comprising a patch (annular disk 34) which is made of a heat-activated sealant material, wherein the patch (34) is configured to cover said second portion (12) and has a center portion that is supported by the deck portion (12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the physical barrier of SCHMITZ et al. by making his patch larger so as to be configured to cover the second portion, not just the outer edges and bottom surface of the lip, and having a center portion supported by the deck portion of the plastic carrier as taught by DANICO in order to provide a tighter seal.

As to claim 24, SCHMITZ et al. in view of DANICO disclose the physical barrier of claim 23 as discussed above.

The examiner notes that the recitation of "wherein said patch is configured to adhere to the panel, and seal an interface between said lip of said carrier and the panel upon being heat-activated" only recites intended assembly. The panel is not positively recited and therefore, does not form a part of the invention. Only the seal per se is claimed and forms a part of the invention. Further, the recitation of "upon being heat-activated" is a method limitation which is not given any patentable weight in an apparatus/product/article of manufacture claim.

Nevertheless, SCHMITZ et al. disclose that said patch (3) is configured to adhere to the panel (30), and seal an interface between said lip (2a) of said carrier (1) and the panel (30) upon being heat-activated (see Abstract, col. 3, lines 31-35, and col. 4, lines 17-22).

In addition, DANICO also discloses that the annular disk (34) is made of a sealant material that has the property of flowing when heated to a predetermined temperature (see col. 3, lines 26-45).

As to claim 25, SCHMITZ et al. in view of DANICO disclose the physical barrier of claim 23 as discussed above.

The examiner notes that the recitation of "wherein at least a portion of said patch is disposed between said carrier and the panel to seal the carrier and the orifice upon being heat-activated" only recites intended assembly. Neither the panel nor its orifice are positively recited and therefore, do not form a part of the invention. Only the seal per se is claimed and forms a part of the invention. Further, the recitation of "upon being heat-activated" is a method limitation which is not given any patentable weight in an apparatus/product/article of manufacture claim.

Nevertheless, SCHMITZ et al. disclose that at least a portion of said patch (3) is disposed between said carrier (1) and the panel (30) to seal the carrier (1) and the orifice (31) upon being heat-activated (see Abstract, col. 3, lines 31-35, and col. 4, lines 17-22).

In addition, DANICO also discloses that the annular disk (34) is made of a sealant material that has the property of flowing when heated to a predetermined temperature (see col. 3, lines 26-45).

Response to Arguments

Applicant's arguments with respect to claims 1-4, 10, and 21-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gay Ann Spahn whose telephone number is (571)-272-7731. The examiner can normally be reached on Monday through Thursday, 8:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)-272-6660. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GAS
Gay Ann Spahn, Patent Examiner
July 4, 2006

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